

Remarks

Review and reconsideration of this application is respectfully requested.

Restriction of the claims to one of the following inventions is required under 35 U.S.C. 121:

1. Claims 20-34, drawn to an apparatus, classified in class 425, subclass 113 and
2. Claims 35-42, drawn to a method, classified in class 264, subclass 209.1.

Applicant hereby affirms the provisional election of claims 20-34 for further prosecution.

The specification has been amended to provide the current status of the prior application.

A new information disclosure statement is included as required by the Examiner.

Drawing FIGS. 6 and 8 have been amended to include reference "line 7-7"

(FIG. 6) and "line 9-9 (FIG. 8). Replace sheets are included herewith.

The typographical errors in claim 34 noted by the Examiner have been corrected.

Claims 28, 29, 31 and 32 have been canceled as required by the Examiner.

Claims 20-34 are rejected under 35 U.S.C. 1102(b) as being anticipated by Ramsey (3,833,325). The Examiner alleges that Ramsey teaches a fixed center die module (Fig. 2) for use in an extrusion apparatus through molten material is continuously extruded to form a tubular structure (Fig. 1). The Examiner states that the fixed center die module is configured such that the molten material is divided into a plurality of separated and equal portions (Figs 2-5); the module has a plurality of raised surfaces (Fig

2, #'s 47, 46, 62, Fig. 5, #'s 46, 62, 90) extending from a central longitudinal axis thereof, the raised surfaces providing a plurality of passages between the plurality of raised surfaces such that the molten material is divided into the plurality of separate and equal portions; the module has a diverter (Fig. 2, at #49) integral with and extending from the outer surface of the tubular member for distributing the molten material through the plurality of passages to uniformly divide the molten material into a plurality of separate and equal portions and provide a balanced flow of the molten material; the diverter distributes the molten material to a first set of passages wherein the molten material is divided into two separated and equal portions, and subsequently urges the molten material in the first set of passages to a second set of passages wherein the two separate and equal portions are subsequently divided into four separated and equal portions (Fig. 2); the fixed center die module exhibits a frusto conical configuration around the center longitudinal axis to slidably mate with a tapered interior wall surface of the extruder housing (Fig. 1 at #28 and Fig. 2 at #35); the tubular member having a uniform inner circumference (Fig. 2) along the longitudinal axis from which the plurality of raised surfaces extend (Fig. 2); the module cooperates with an extrusion die head to provide a balanced flow of the molten material (Fig. 1); the fixed center die module is configured to evenly distribute and coat the molten material onto a cylindrical body issuing from the tubular member (Fig. 1); the extruder is capable of feeding a cylindrical body that is a mandrel, wire or tubular structure (Fig. 1); the balanced flow of molten material is capable of being extruded as an unsupported tubular structure; the extrusion apparatus is a crosshead extruder (Fig. 1); the module is capable of being used in the manufacture of high pressure hose or power steering hose (Fig. 1); the configuration of the fixed center die module precludes the need for continuous die adjustment to achieve predetermined cross-section and uniform wall gauge concentricity of the tubular structure (Fig. 1); and the module has a tubular member having a uniform inner circumference and an outer surface along its central longitudinal axis.

Applicant has amended claim 20 to better define the fixed center die module as having a rear end and a front end wherein the die module exhibits a frusto conical configuration from the rear end to the front end, a tubular member having a uniform inner

circumference extending along the central axis of the die module and a plurality of raised surfaces extending from the tubular member. According to Ramsey, the various lands on the guider tube all have a radius, which is the same as that of the main passage. More specifically, Ramsey positively states that the various lands and forwardly and rearward thereof all have a uniform radius (col. 4, lines The frusto 4-8). The die member of the present invention, on the other hand, is configuration to have a non-uniform radius wherein the die member is describe as having a frusto conical configuration in which the outer surface of the frusto conical configuration is defined by the various lands of the raised surfaces. In the Ramsey patent, the molten plastic material is divided and then divided again along a linear path having a uniform radius. At the end of the linear path, the inner circumference of the sheath is uniformly reduced on the frusto conical tip and then coated onto the core. The molten plastic material of the present invention is divided into two equal portions and then the two equal portions are further divided into four equal portions along a frusto conical configuration while the inner circumference of the material remains constant and the outer circumference is continuously decreased from the rear end of the die module to the front end of the die module as the molten material flows toward the exit or front end of the die module thereby providing a plastic sheath which prevents or drastically reduces undesirable weld or joint lines in the finished product. In view of the unobvious distinctions between the present die module and that of Ramsey, it is believed that this rejection can now be withdrawn.

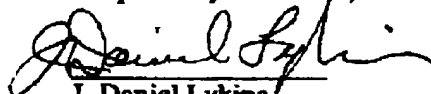
Claims 20-24 and 26-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Bentivoglio (5,984,657). In view of the cancellation of claim 25 and the incorporation thereof into independent claim 20, it is believed that this rejection can be withdrawn.

Claims 20-34 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2 and 4-8 of U.S. Patent No. 6,716,021.

A terminal disclaimer is submitted simultaneously herewith for the purpose of overcoming this rejection. Accordingly, this rejection can now be withdrawn.

In view of the foregoing amendments and remarks, and the attached replacement drawing sheets and terminal disclaimer, it is believed that this application is now in condition for allowance and an early indication thereof is earnestly solicited.

Respectfully submitted,



J. Daniel Lykins
Reg. No. 27,354

Dayco Products, LLC
1 Prestige Place
Miamisburg, Ohio 45342
Telephone No.: (937) 226-5725